

CLAIMS:

1. A hermetically encapsulated refrigerant compressor, comprising a hermetically sealed compressor housing (1), in the interior of which a piston-cylinder unit works which compresses a refrigerant and comprises a suction valve with an intake port (24) arranged in a valve plate (11) of the same, with a suction muffler (16) being provided on the cylinder head (15) of the piston-cylinder unit, which suction muffler (16) comprises a filling volume (20) and through which the refrigerant flows to the suction valve of the piston-cylinder unit, and with the suction muffler (16) having an inlet cross section (18) through which refrigerant flows into the suction muffler (16) and with a compensating volume (21) being provided which is in connection with the suction muffler (16) and the interior of the compressor housing (1) and in which the refrigerant oscillates, **characterized in that** the inlet cross section (18) is simultaneously the connecting port (26) between the compensating volume (21) and the filling volume (20) and the compensating volume (21) is formed by an outer tube (22) which on the one hand tightly encloses the intake port (24) or the inlet cross section (18) and on the other hand encloses the refrigerant suction pipe (17) at least along a section and is directed into the compressor housing (1), which suction pipe is connected with the evaporator of the refrigerant compressor and extends into the interior of the compressor housing (1).
2. A hermetically encapsulated refrigerant compressor according to claim 1, characterized in that the suction pipe (17) is guided shortly to a point shortly before the intake port (24) in the outer tube (22).
3. A hermetically encapsulated refrigerant compressor according to one of the claims 1 and 2, characterized in that the outer tube (22) and the suction muffler (16) are provided

with an integral configuration.

4. A hermetically encapsulated refrigerant compressor according to one of the claims 1 to 3, characterized in that the compensating volume (21) is 0.5 to 1.2 times the working volume of the piston of the piston-cylinder unit.
5. A hermetically encapsulated refrigerant compressor according to one of the claims 1 to 3, characterized in that the compensating volume (21) is at least half, preferably 0.5 to 3 times the working volume of the piston of the piston-cylinder unit.
6. A hermetically encapsulated refrigerant compressor according to one of the claims 1 to 5, characterized in that the smallest flow cross section (32) in the compensating volume (21) has a cross-sectional surface area which corresponds to $1/4$ to $3/4$ of the cross-sectional surface area of the intake port (24).
7. A hermetically encapsulated refrigerant compressor according to one of the claims 1 to 6, characterized in that the cross-sectional surface area of the compensating volume (21) is at most 1.5 times the piston head surface area of the piston of the piston-cylinder unit.
8. A hermetically encapsulated refrigerant compressor according to one of the claims 1 to 7, characterized in that the compensating volume (21) has a circular cross section and the ratio of the length of the compensating volume (21) to its diameter is higher than 10.